

PREVENTING GROUNDWATER POLLUTION: AUTO REPAIR SHOPS

PREVENTING GROUNDWATER POLLUTION IS EVERYONE'S JOB!

Even if our drinking water comes from rivers, lakes, or reservoirs, we need to be mindful of the things we do that may pollute groundwater. That is because the groundwater beneath us may travel great distances to eventually feed springs or wells being used for someone's water supply.

THE GROUNDWATER PROTECTION PLAN REGULATION HELPS US PREVENT GROUNDWATER POLLUTION

Once polluted, groundwater is very difficult and expensive to clean up. It is always best to **prevent** groundwater pollution in the first place. That is the purpose of 401 KAR 5:037, the Groundwater Protection Plan Regulation. Section 2 of this regulation lists the activities that require a Groundwater Protection Plan (GPP). Should any of those activities occur at your shop, you must develop a GPP.

WHAT ARE SOME ACTIVITIES THAT AUTO REPAIR SHOPS SHOULD PAY SPECIAL ATTENTION TO?

This fact sheet will bring your attention to some activities that you may not be aware of that can seriously pollute groundwater. If these activities occur at your shop, they definitely should be dealt with in your GPP. Keep in mind that this fact sheet doesn't include all the activities that occur at automotive repair shops that may be covered under 401 KAR 5:037. Please read Section 2 carefully to be sure that you include all the activities conducted at your shop that are subject to this regulation.

1. FLOOR DRAINS, WHERE DO THEY LEAD?

Most exterior drains and some interior drains are not connected to a sanitary sewer system, but instead are storm drains that lead directly to a ditch, stream, lake, or dry well. Discharging contaminated washwater into any of these may contaminate groundwater.

Check with the local sewer utility or city engineering department to verify where your drains lead. In Kentucky, floor drains **must** connect to an onsite sewage disposal system, a closed-loop collection/recovery system, or a wastewater treatment system permitted by the Kentucky Pollutant Discharge Elimination System (KPDES) (401 KAR 5:037, Section 3,(5)(c))). If floor drains don't connect to one of the aforementioned, or you don't know if they do, the Groundwater Branch recommends that **the drains must be plugged immediately**, even if they are not being used.

2. CAN DRAINS LEAD TO SEPTIC SYSTEMS?

Only if they are carrying sanitary wastewater—water from the bathroom or kitchen. Under **NO** circumstances should any hazardous fluids such as antifreeze, oils, or solvents, or washwater carrying these pollutants be allowed to enter a floor drain leading to a septic system. If hazardous fluids or washwater carrying the previously mentioned contaminants are currently being disposed through an onsite sewage disposal system, the activity must stop **immediately and the drain plugged immediately**.

3. DO YOU HAVE AN ABOVE GROUND STORAGE TANK (AST)?

Unless it is inside a building with an impervious floor, AST's holding 55 gallons or more must have secondary containment. Poured concrete, metal, or compacted clay with a liner compatible with the material in the AST may be used in the construction of the floor and berm of the containment. Exposed gravel, dirt, or clay surfaces without a liner are not acceptable. Petroleum products such as gasoline, diesel fuel, or recycled oil will seep through them.

4. DO YOU HAVE AN UNDERGROUND STORAGE TANK (UST)?

UST's, especially old tanks, can pose a serious risk to groundwater. Secondary containment (such as double-walls) is required. Periodic tank testing is also protective of groundwater. Monitoring wells may be required in some cases.

In Kentucky, UST's are regulated by 401 KAR 42. These regulations contain elements that are protective of groundwater and may be incorporated into your GPP.

5. SOME BMP'S FOR STORING POTENTIAL CONTAMINANTS

- Store potential pollutants in sealed, leak-proof containers.
- Store potential pollutants inside or in a structure protected from the weather and against vandalism.
- Drums containing potential pollutants should be stored in a designated, curbed location where they will not be accidentally tipped over, or punctured, and are protected from the weather.
- Spill cleanup and a containment kit must be available in locations where leaks of potential pollutants could reach the ground or groundwater.

SOME USEFUL WEBSITES FOR POLLUTION PREVENTION INFORMATION

- <http://www.ccar-greenlink.org> provides a Consolidated Screening Checklist for Automotive Repair Facilities.
- <http://www.nr.state.ky.us/nrepc/dep/waste> "Managing Automotive Repair Shop Wastes, a Guide for Automotive Repair Shop Operators," can be downloaded from this site.
- <http://www.epa.gov/region09/p2/autofleet> A package of fact sheets entitled "The Pollution Prevention tool Kit, Best Environmental Practices for Auto Repair" or "The Pollution Prevention Tool Kit, Best Environmental Practices for Fleet Maintenance" can be downloaded from this site.
- <http://www.autobodypro.com> This website for the auto collision repair industry has a safety and environment site with information on human and environmental safety tips.
- <http://www.deq.state.mi.us> A Groundwater Protection Fact Sheet on Pollution Prevention at Small Commercial & Industrial Facilities can be downloaded from this site.